

# *Mixed Cost Analysis Example*

## *High – Low Method*

Suppose the following observations are made by U-Ship-It; a merchandising firm:

Month	Units Produced	Production Cost
January	62	225
February	116	360
March	55	215
April	30	150
May	46	180

**High Activity**

**Low Activity**

**Step 1:** Identify the **High Activity** and the **Low Activity** on the above table.

**Step 2:** Calculate the Variable Cost per Unit

$$\text{Variable Cost per Unit} = \frac{\text{change in Cost}}{\text{change in Activity}} = \frac{\$360 - 150}{116 - 30 \text{ units}} = \frac{\$210}{86 \text{ units}} = \$2.44 / \text{unit}$$

**Step 3:** Calculate the Fixed Cost

Using either the High Activity numbers or the Low Activity Numbers, calculate the Fixed Cost

Formula:

$$\text{Fixed Cost} = \text{Total Cost} - \text{Total Variable Cost}$$

Expanded Formula:

$$\text{Fixed Cost} = \text{Total Cost} - (\# \text{ of Units} \times \text{Variable Cost per Unit})$$

Using the High Activity numbers...

$$\text{Fixed Cost} = \text{Total Cost} - (\# \text{ of Units} \times \text{Variable Cost per Unit})$$

$$\text{Fixed Cost} = \$360 - (116 \times 2.44)$$

$$\text{Fixed Cost} = 360 - 283.04$$

$$\text{Fixed Cost} = \$76.96$$

**Step 4:** Write the Cost Formula

$$\text{Cost Formula} = \$76.96 \text{ fixed costs} + \$2.44 \text{ per unit per month}$$